

REMARKS

In the Final Office Action mailed January 29, 2007, claims 1-28, 32-48 and 57-64 were pending and stand rejected. Claims 29-31 were objected to but indicated to be allowable if rewritten in independent form incorporating the base claim and any intervening claims. Reconsideration of the present application including claims 1-48 and 57-64 is respectfully requested.

Claims 1-7, 15 and 16 were rejected under 35 US 102(b) as being anticipated by U.S. Patent No. 1,400,616 to McCrory. Claim 1 recites, among other features, "wherein said first and second portions of said frame each include a recess to receive clamping devices coupled to respective ones of said retractors about said frame with said clamping devices being slideable from said respective recess along a respective one of said first and second portions of said frame for attachment to said respective portion of said frame at a selected position therealong spaced from said recess." McCrory, in contrast, discloses a frame with through-holes to axially receive threaded stems through the frame at selected positions about the frame. The Final Office Action asserts that the screws are "slideable (screws can move in and out) from said respective recess along a respective one of said first and second portions of said frame for attachment to said respective portion of said frame at a selected position therealong spaced from said recess" and that "the screws fit through their respective recesses and are capable of movement relative to the frame." The assertion is traversed. While the threaded stems may be movable in the holes in the frame, the elements arranged as recited in claim 1 are not disclosed in McCrory. In contrast, once the screw is withdrawn from the hole in the frame of McCrory, it is detached from the frame and cannot slide along the frame from the hole to the next hole. If one were to attempt slide the screw from one hole to the next without detaching it from the frame, the portion of the frame around the hole would prevent the screw from sliding along the frame from the hole.

Furthermore, McCrory lacks any "clamping devices coupled to respective ones of said retractors about said frame..." as recited in claim 1. Rather, McCrory discloses the retractors include threaded stem 8 on which is received a collar 4 and a wing nut 9. The collar and wing nut are engaged to one side of the frame 1 and are threaded along stem 8 to contact the frame 1 to pull the retractor against the incision and maintain the retractor in this position. However, the wing nut and collar are not clamping devices coupled to respective ones of the retractors about

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the frame as recited in claim 1, nor is there any structure in addition to or as an alternative to the collar and wing nut that is positioned about the frame as a clamping device. Therefore, claim 1 and claims 2-7, 15 and 16 depending therefrom distinguish McCrory, and withdrawal of this basis of the rejection is respectfully requested.

Claims 41, 44 and 45 were rejected under 35 USC 102(b) as being anticipated by DE 8704901 to Kluger. Claim 41 recites, among other features, "first and second adjustment mechanisms coupled to respective ones of said first and second distractor mechanisms adjacent a proximal end of said respective distractor mechanism, said adjustment mechanisms each including a first condition in locking engagement with said respective distractor mechanism to fixedly secure said distractor mechanism relative to said frame, said adjustment mechanisms further each including a second condition in pivotal engagement with said respective distractor mechanism to permit proximal ends of said distractor mechanisms to pivot relative to said adjustment mechanism about said distal ends thereof toward and away from said frame." Kluger, in contrast, discloses "frame" 2 and first and second "distractor mechanisms" 2, 4 that all move together when the first and second "distractor mechanisms" 2, 4 are moved about the pivoting portions 5, 5a. Furthermore, mechanism 4 is moveable along the threaded arm portion of mechanism 2 with a threaded nut 3, and thus only move in linear translation relative to one another along frame 2. Accordingly, there does not appear to be any disclosure of an arrangement including pivoting of "distractor mechanisms" 2, 4 toward and away from any frame since the frame and mechanisms 2, 4 are rigidly coupled to one another. Nor is there disclosed any adjustment mechanism that locks the distractor mechanism and is also pivotally engaged to the distractor mechanism to permit such movement.

The application of Kluger to claim 41 is not clear. The Examiner asserts that element 2 is a frame and also that elements 4 and 2 are first and second distractor mechanisms. Claim 41 recites "a frame lying in at least one plane" and "first and second distractor mechanisms attachable to said frame and extending transversely to said at least one plane, said first and second distractor mechanisms each including a distal end engageable to a respective one of said first and second anchors." It is not clear how element 2 can be a frame lying in a plane and also be a distractor mechanism that is attachable to itself and extend transversely to itself. Thus, a

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prima facie case for rejecting claim 41 in view of Kluger has not been established for this additional reason.

The Final Office Action also asserts that Kluger discloses "the proximal ends of said distractor mechanisms (30, 31) to pivot relative to said adjustment mechanism (22, 23) about said distal ends thereof toward and away from said frame." Elements 30, 31 are not proximal ends of the distractor mechanism, but rather are located at the distal ends of arms 17, 17a where the arms 17, 17a mount to the anchors. Claim 41 recites that the distractor mechanism includes "a distal end engageable to a respective one of said first and second anchors." Elements 30, 31 in Kluger are engaged to the anchors 19 and thus would appear to correspond to the distal ends of the "distractor mechanisms" 2 and 4, at least according to the arrangement recited in claim 41. Accordingly, even if distal ends 30, 31 were able to pivot relative to adjustment mechanism 22, they are not proximal ends of the distractor mechanism and therefore do not disclose the arrangement in claim 41 where "said adjustment mechanisms further each including a second condition in pivotal engagement with said respective distractor mechanism to permit proximal ends of said distractor mechanisms to pivot relative to said adjustment mechanism about said distal ends thereof toward and away from said frame." Accordingly, claim 41 and claims 44, 45 depending therefrom are allowable and withdrawal of this basis of the rejection is respectfully requested.

Claim 57-64 were rejected as being anticipated by U.S. Patent No. 5,728,046 to Mayer. The Final Office Action asserts with reference to Attachment A that arm 4 of frame 5 in Mayer is both an outer shaft and an inner shaft movably positioned in an outer shaft. It is not clear how an arm of the frame that is solid, like arm 2 shown in Fig. 3 of Mayer, and of one piece could be properly considered to disclose an inner shaft movably positioned in an outer shaft. The Final Office Action also asserts that the linear teeth along arms 2, 4 of the frame and the engagement relationship with the teeth of elements 22, 23 is somehow a concave-convex pivot path of the distractor mechanism. It is not clear how the linear ratchet tooth profile along arms 2, 4 could form a concave pivot path for either of the support feet 39, 40 since there is no disclosure that either of the arms 2, 4 is concave or that support feet 39, 40 pivot relative to any portion of the respective arm 2, 4 to which it is engaged. The Final Office Action also asserts that elements 22, 23 extend from a distal end of an inner shaft, which is presumably arm 4 based on Attachment A

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of the Final Office Action. However, it is clear that elements 22, 23 do not extend from the distal end of any portion of frame 2 or of any inner shaft. Accordingly, at least for these reasons, Mayer cannot properly support a prima facie case for rejecting claim 57 as being anticipated and withdrawal of the rejection of claim 57 is respectfully requested.

With respect to claim 58, the Final Office Action asserts that elements 22, 23 include a number of teeth that lockingly engage a number of teeth that are threads of a screw along a concave-convex pivot path of the distractor mechanism (threads of the screw and the teeth on the frame.) As shown in Fig. 2, support feet 39, 40 are coupled to frame 2 in a non-rotatable manner such that support feet 39, 40 could not pivot about frame 2. Mechanisms 22, 23 translate the support feet 39, 40 and elements 20 along the respective arms 2, 4 of the frame in a linear fashion. Accordingly, threads of elements 22, 23 and the linear teeth along arms 2, 4 of the frame do not define a concave-convex pivot path of the support feet 39, 40 as asserted in the Final Office Action, and withdrawal of this basis of the rejection is respectfully requested.

The Final Office Action also asserts that elements 39, 40 are proximal flanges pivotally coupled to a pair of plates 32. As shown in Fig. 2, Mayer discloses support feet 39, 40 each include a retractor body 32 that is integrally formed and fixed relative to the proximally extending spindle 29. There is no disclosure or any basis for the assertion that in Mayer the retractor body 32 pivots or is pivotally coupled to spindle 29. Accordingly, withdrawal of this basis of the rejection of claim 58 is respectfully requested for this additional reason.

With regard to claims 59-64 depending from claim 58, these claims are also allowable. For example, with respect to claim 59, it is not clear how element 39 can be proximal flanges as recited in claim 58 and also a roller pin coupled between element 32 and extending through an arcuate slot of element 32. Withdrawal of this basis of the rejection of claims 59-64 is respectfully requested.

Claims 8-11, 13, 17, 21-27, 32, 33, 36-43 and 46-48 were rejected under 35 USC 103(a) as being unpatentable over McCrory in view of Mayer. Claims 8-11 and 13 depend directly or indirectly from claim 1 and are believed allowable at least for the reasons claim 1 is believed allowable. Accordingly, withdrawal of this basis of the rejection of claims 8-11 and 13 is respectfully requested.

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Claim 17 recites first and second distractor mechanisms and “further comprising at least one adjustment mechanism engaged to at least one of said first and second distractor mechanisms at a pivoting coupling location adjacent a proximal end of said at least one distractor mechanism and a clamping device movable along said frame and operable to clampingly engage said adjustment mechanism to said frame.” In McCrory, the threaded stems 8 are fixed relative to the retaining hooks 12 at their proximal ends. Mayer et al. also discloses an arrangement where threaded spindle 29 is fixed relative to the retractor body 32 at the location adjacent the proximal end of body 32 where they are coupled to one another. With regard to amended claim 17, the Final Office Action asserts that Mayer disclose “at least one adjustment mechanism (22 or 23) engaged to at least one of said first and second distractor mechanisms (22, 23 engage with 30, 31) at a pivoting coupling (22, 23) location adjacent a proximal end of said at least distractor mechanism (Figure 1) and a clamping device (24, 25) movable along said frame and operable to clampingly engage said adjustment mechanism to said frame (col. 3, lines 15-20.)” It is respectfully submitted that elements 22, 23 in Mayer are not engaged to support feet 39, 40 having retractor bodies 32 at a pivotal coupling location of the retractor bodies 32. In fact, support feet 39, 40 have no pivoting coupling location with the frame. As shown in Fig. 3, support feet 39, 40 are rigid, one piece elements from which retractor bodies 32 extend, and frame 5 has arm 2 forming a non-rotating interface with holder 20 such that pivoting of either of the holder 20 or clamping screws 22, 23 relative to arms 2 or 4, or pivoting of support feet 39, 40 relative to arm 2 or 4, is not possible. While elements 22, 23 include screw elements that are rotatable about their respective axes, there is no disclosure that elements 22, 23 engage support feet 39, 40 at a pivoting coupling location. Rather, the screw portions of elements 22, 23 are spaced away from the proximal end of the support feet 39, 40 and do not engage support feet 39, 40 as clearly shown in Fig. 1. Accordingly, the assertions made in the Final Office Action in rejecting claim 17 are traversed, and neither of the references, either alone or in combination with one another, teaches or suggests the elements recited in claim 17. Withdrawal of this basis of the rejection of claim 17 and claims 21-27, 32, 33, and 36-40 depending therefrom is respectfully requested.

Claim 41 recites, among other features, “first and second adjustment mechanisms coupled to respective ones of said first and second distractor mechanisms adjacent a proximal

end of said respective distractor mechanism, said adjustment mechanisms each including a first condition in locking engagement with said respective distractor mechanism to fixedly secure said distractor mechanism relative to said frame, said adjustment mechanisms further each including a second condition in pivotal engagement with said respective distractor mechanism to permit proximal ends of said distractor mechanisms to pivot relative to said adjustment mechanism about said distal ends thereof toward and away from said frame.” In McCrory, the threaded stems 8 are fixed relative to the retracting hooks 12 at the location adjacent the proximal end of the hooks 12 where they come together. As the stem 8 is moved through the frame through-hole, the proximal and distal ends of the hooks 12 follow the stem such that there is no pivoting of the proximal end of the stem about the distal end toward or away from the frame.

Mayer et al. fails to remedy the deficiencies of McCrory since it also discloses an arrangement where threaded spindle 29 is fixed relative to the retractor body 32 with a corresponding one of the integral support feet 39, 40. As the location of the retractor body 32 is adjusted relative to the frame with spindle 29, the proximal and distal ends of the retractor body 32 also move together toward or away from the frame such that there is no pivoting of the proximal end of retractor body 32 about the distal end of retractor body 32 or toward and away from the frame. For example, col. 4, lines 7-11 of Mayer disclose that adjustment of the nuts 30 and 31 repositions the support feet 39, 40 and the vertebral bodies engaged thereto. The Final Office Action asserts that “proximal ends of said distractor mechanisms (30, 31) pivot relative to adjustment mechanism (22, 23) about said distal ends thereof toward and away from said frame (col. 3, lines 29-36.)” As discussed above with respect to claim 17, there is no portion of the retractor body 32 or support feet spindle 29 that pivots toward and away from the frame. While adjustment nuts 30, 31 can rotate about their axes along spindle 29, they do not pivot about the distal ends of support feet 39, 40.

Furthermore, the Final Office Action provides no indication of how the references disclose that elements 22, 23 include any first condition in locking engagement with either of the support feet 39, 40 or “distractor mechanisms 30, 31”. Devices 24, 25 engage the teeth along the arms 2, 4 to maintain the position of holders 20, 21. See col. 3, lines 14-20. However, devices 24, 25 do not lockingly engage support feet 39, 40 or elements 30, 31 positioned about spindles 29. Accordingly, neither of the references, either or alone or in combination with one another,

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teaches or suggests the elements recited in claim 41, and withdrawal of this basis of the rejection of claim 41 and claims 42-43 and 46-48 is respectfully requested.

Claims 12, 14, 18-20, 28, 34 and 35 were rejected under 35 USC 103(a) as being unpatentable over McCrory in view of Mayer and further in view of U.S. Patent Application Publication No. 2002/0161368. These claims depend from claims that are believed allowable. Accordingly, withdrawal of this basis of the rejection of these claims is respectfully requested.

Reconsideration of the present application including claims 1-48 and 57-64 is respectfully requested. The Examiner is encouraged to contact the undersigned to resolve any outstanding issues with respect to the present application.

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